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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/555,092

11/02/2005

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OGW-0398

9356

7590 09/02/2009
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EXAMINER

KNABLE, GEOFFREY L

ART UNIT

PAPER NUMBER

1791

MAIL DATE

DELIVERY MODE

09/02/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/555,092	Applicant(s) KANENARI, DAISUKE	
	Examiner Geoffrey L. Knable	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7 and 8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,7 and 8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1791

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 12-13, reference is made to "forming one type of rolled body" for each diameter, this being further amended to define "to form rolled bodies". It however is still not clear which of the preceding plural winding steps forms these "rolled bodies" as this term is not used previously in the claim while there are plural winding steps that presumably could form rolled bodies. This ambiguity would seem to be avoided if the insertion of "to form rolled bodies" currently at line 13 were instead added for example after "continuous tubular film" in line 11.

3. Claims 1, 2, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaido et al. (US 5,938,869) taken in view of at least one of [Martin et al. (US 4,261,786) and Klose et al. (US 5,135,601)], at least one of [Hashimura et al. (US 2002/0033557) and Kaido et al. (US 6,136,123)] and at least one of [the Encyclopedia of Polymer Science and Technology article entitled "Coating Methods (newly cited), Survey", Mitchell et al. (US 3,409,460 - newly cited) and Morse (US 2,357,536 - newly cited)], and optionally further in view of JP 2002-103471 to Bridgestone.

These references (except the newly cited references) are applied for substantially the same reasons as set forth in the last office action, although JP '471 is again optionally applied. In particular, as previously noted, Kaido et al. '869 suggests

Art Unit: 1791

that an adhesive can be used but does not detail application thereof to the tubular film.

In view of Hashimura et al. and Kaido et al. '123, "dip coating" is taught for coating a thermoplastic elastomer film type tire innerliner and would therefore have been understood by the ordinary artisan in this art as an obvious method for coating the adhesive to a thermoplastic elastomer based tire inner liner (including even a cylindrical film inner liner in view of Kaido et al. '123) as in Kaido et al. '869. As to what would be understood by the ordinary artisan as dip coating, in view of the newly cited Encyclopedia of Polymer Science and Technology excerpt (esp. page 653), as well as newly cited Mitchell et al. and Morse, the ordinary artisan would have understood a suggestion for conventional "dip coating" as suggesting a typical process including dipping/submerging the film in a tank one time for only the expected and predictable results.

As to when the coating is actually effected relative to winding/unwinding, it is first again noted that Kaido et al. '869 suggests that the tubular film can be wound up on a roll and later supplied to the tire building process. Since you can't easily coat a film when in a roll, when applied as a coating, it would have been readily apparent that it would have to be applied after formation of the cylindrical/tubular film and on an unrolled film. Whether this is done before initial rolling up or as an intermediate stage requiring unrolling and rerolling (since coating can only occur on the unrolled material) would have represented obvious alternatives to the ordinary artisan dictated by for example space and tooling concerns - only the expected and predictable results would be achieved following any given selection, it being noted that unwinding and rewinding

Art Unit: 1791

would provide the self-evident benefit of allowing flexibility in terms of the time and location of when/where the coating operation takes place. Note further that the Encyclopedia of Polymer Science and Technology excerpt indicates that a typical basic coating process includes unwinding, coating, solidifying/drying and rewinding - e.g. note the abstract as well as page 636. Mitchell et al. likewise shows this (note rolls 1, 2). To coat any continuous film, including a film as in Kaido et al. '869, by unwinding, coating, drying and then rewinding would therefore have been obvious to the ordinary artisan desiring to effect a continuous coating and would lead to only the expected and predictable results.

JP '471 has been optionally cited as additional evidence that the ordinary artisan, faced with a desire to coat a cylindrical/tubular film used in the formation of a tire innerliner, understands that one way to effect this is to unwind the film, coat/dry and rewind the film - note esp. fig. 2 and paragraphs [0113]-[0115] of included machine translation. Such would have further motivated the ordinary artisan to effect the adhesive coating in the claimed manner with a reasonable and predictable expectation of success.

4. Applicant's arguments filed 6/3/2009 have been fully considered but they are not persuasive.

With respect to JP '471 (although note that this is now optionally applied), it is argued that a difference between the claimed invention and JP '471 is when the film is cut, it being argued that "JP '471 has the unvulcanized inner liner member 28 cut and conveyed on a conveyor belt 30 during the winding of the tubular films into rolled

Art Unit: 1791

bodies.” The fig. 2 embodiment however clearly shows the winding up of the adhesively coated film. The conveyor belt (30) in the reference is for transport of the cut film presumably to the tire building machine, it further being noted that the fig. 1 embodiment is different from that of fig. 2 as in fig. 1, the film is cut prior to coating. Note again the JP ‘471 is optionally applied solely as *additional* evidence that the ordinary artisan, faced with a desire to coat a cylindrical/tubular film used in the formation of a tire innerliner, understands that one way to effect this is to unwind the film, coat/dry and rewind the film - note esp. fig. 2 and paragraphs [0113]-[0115] of included machine translation. Such would have further motivated the ordinary artisan to effect the adhesive coating in the claimed manner with a reasonable and predictable expectation of success.

It is also argued that JP ‘471 does not dip the film only one time as now claimed. This is not disputed but note the newly applied prior added to show that a typical dip coating process, as suggested by Hashimura and Kaido ‘123, would typically include a single dipping in a tank. JP ‘471 merely provides further evidence that the ordinary artisan would not have found it unobvious to unwind/rewind when coating a tubular tire innerliner.

With respect to the adhesive being coated, note again the basic teaching to dip coat an adhesive on a tubular film tire innerliner comes from Kaido et al. ‘869 taken with Kaido ‘123 and Hashimura - not from JP ‘471.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1791

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1791

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey L. Knable/
Primary Examiner, Art Unit 1791

G. Knable
August 31, 2009